FLORICULTURE DESIGN AND MANAGEMENT STANDARDS

This document was prepared by:

Office of Career, Technical and Adult Education
Nevada Department of Education
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State Board for Career and Technical Education on
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NEVADA STATE BOARD OF EDUCATION
NEVADA STATE BOARD FOR CAREER AND TECHNICAL EDUCATION

CTE MISSION STATEMENT:

The Office of Career, Technical and Adult Education is dedicated to developing innovative educational opportunities for students to acquire skills for productive employment and lifelong learning.

NEVADA DEPARTMENT OF EDUCATION

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ACKNOWLEDGEMENTS

The development of the Nevada career and technical standards project was a collaborative effort sponsored by the Office of Career, Technical and Adult Education at the Department of Education and the Career and Technical Education Consortium of States. The Department of Education must rely on teachers and industry representatives who have the technical expertise and teaching experience to develop standards and performance indicators that truly measure student skill attainment. Most important, however, is recognition of the time, expertise and great diligence provided by the writing team members in developing the career and technical standards for Floriculture Design and Management.

STANDARDS DEVELOPMENT MEMBERS

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BUSINESS AND INDUSTRY VALIDATION

All CTE standards developed through the Nevada Department of Education are validated by business and industry through one or more of the following processes: (1) the standards are developed by a team consisting of business and industry representatives; or (2) a separate review panel was coordinated with industry experts to ensure the standards include the proper content; or (3) the adoption of nationally-recognized standards endorsed by business and industry.

The Floriculture Design and Management Standards were validated through active participation of business and industry representatives on the development team and validated through a complete review by an industry panel.

PROJECT COORDINATOR

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Nevada Department of Education

AGRICULTURE AND NATURAL RESOURCES
Program Requirements

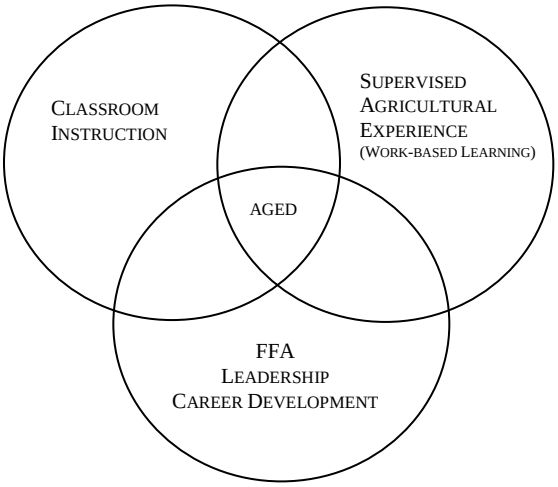
Occupations associated with agriculture production, natural resources, processing and distribution of food and fiber are important to the national interests and provide significant employment opportunities. Occupational education and training in agriculture and agri-business are essential to the continued economic health of Nevada and the nation, as it provides the needed competent and trained work force.

Agriculture education provides high school students with technical and specialized knowledge in production agriculture and natural resources as well as other specific agriculture occupations. The programs are designed to meet students' occupational objectives, interests, and abilities for entry into chosen occupations and can prepare them for advanced education and training. Agriculture education is a coordinated program of group and individual instructional activities consisting of classroom instruction, laboratory experiences, and leadership development. Integral to these activities are FFA (leadership development) and Supervised Agricultural Experience (work-based learning), Nevada Revised Statute 385.110. Federal/Public law#105-225 which was passed in August, 1998, states "Congress of the United States recognizes the importance of the FFA as an integral part of the program of Vocational Agriculture." All students enrolled in Agriculture Education will be recognized as members of the FFA organization. All secondary agriculture education programs and school districts will purchase a curriculum packet consisting of the New Horizons agriculture career and technical magazine, the FFA manual, and the Nevada Record Book on a yearly basis for every student enrolled in agriculture education in their program. Areas of study at the secondary level are divided into Agriculture Science and Specialized Advanced Agriculture Career and Technical Areas.

Agriculture and Society, Plant and Soil Science, Agriculture Mechanical Engineering and Technology, Animal Science, Leadership/FFA, Agriculture Business, Sales, Marketing and Supervised Agriculture Experience, Natural Resources, and Employability are included in the Agriculture Science introduction division.

Instruction in business/specialized agriculture provides training in specific occupational skills, duties, and tasks, as determined by the business and industry needs. Specialized career and technical agriculture programs will include, but are not limited to, the following: ornamental horticulture, floriculture design, turf and landscape management, equine science and technology, forestry technology, wildlife management and enforcement, food science and processing, feedlot management, animal science, veterinary science, agriculture power systems, natural resources and reclamation, mining science and operations, nursery and greenhouse management, landscape architecture, irrigation and chemical management, lawn care and maintenance, and agriculture construction

NEVADA
AGRICULTURE EDUCATION
Model of Instruction



INTRODUCTION

The standards in this document are designed to clearly state what the student should know and be able to do upon completion of an advanced high school Floriculture Design and Management program. These standards are designed for a three-credit course sequence that prepares the student for a technical assessment directly aligned to the standards.

These exit-level standards are designed for the student to complete all standards through their completion of a program of study. These standards are intended to guide curriculum objectives for a program of study.

The standards are organized as follows:

Content Standards are general statements that identify major areas of knowledge, understanding, and the skills students are expected to learn in key subject and career areas by the end of the program.

Performance Standards follow each content standard. Performance standards identify the more specific components of each content standard and define the expected abilities of students within each content standard.

Performance Indicators are very specific criteria statements for determining whether a student meets the performance standard. Performance indicators may also be used as learning outcomes, which teachers can identify as they plan their program learning objectives.

The crosswalk and alignment section of the document shows where the performance indicators support the English Language Arts and the Mathematics Common Core State Standards, and the Nevada State Science Standards. Where correlation with an academic standard exists, students in the Floriculture Design and Management program perform learning activities that support, either directly or indirectly, achievement of one or more Common Core State Standards.

All students are encouraged to participate in the career and technical student organization (CTSO) that relates to their program area. CTSOs are co-curricular national associations that directly enforce learning in the CTE classroom through curriculum resources, competitive events, and leadership development. CTSOs provide students the ability to apply academic and technical knowledge, develop communication and teamwork skills, and cultivate leadership skills to ensure college and career readiness.

The Employability Skills for Career Readiness identify the “soft skills” needed to be successful in all careers, and must be taught as an integrated component of all CTE course sequences. These standards are available in a separate document.

CONTENT STANDARD 1.0 : HISTORY OF FLORAL DESIGN	
PERFORMANCE STANDARD 1.1 : DESCRIBE THE DEVELOPMENT OF DESIGN TECHNIQUES THROUGHOUT HISTORY	
1.1.1	List the periods of influence on floral design
1.1.2	Distinguish between different periods influencing floral design
1.1.3	Construct a visual timeline illustrating the evolution of floral design
1.1.4	Create a period-appropriate arrangement for an influential period throughout history
1.1.5	Relate current design trends to their historical influence

CONTENT STANDARD 2.0: EXPLORE THE USE OF COLOR IN FLORAL DESIGN	
PERFORMANCE STANDARD 2.1 : EXAMINE HOW COLOR IS USED IN DESIGN	
2.1.1	Identify six color harmony combinations
2.1.2	Define tint, hues, and shades
2.1.3	Create a color wheel
2.1.4	List the primary, secondary, and tertiary colors
2.1.5	Create an arrangement using an identified color harmony combination
2.1.6	Discuss the relationship of color to emotions/symbolism

CONTENT STANDARD 3.0:	UNDERSTAND THE IMPORTANCE OF BUSINESS PRINCIPLES AND PRACTICES IN THE FLORICULTURE INDUSTRY
PERFORMANCE STANDARD 3.1 :	**EXAMINE THE DIFFERENCE BETWEEN RETAIL, WHOLESALE, AND PRODUCTION FLORICULTURE BUSINESSES**
3.1.1	Examine retail, wholesale and production floriculture businesses in the US and abroad
3.1.2	Relate supply and demand to retail, wholesale and production floral markets
3.1.3	Examine the economic connection from production through retail
PERFORMANCE STANDARD 3.2 :	**EXPLAIN HOW SUPPLY AND DEMAND AFFECTS THE FLORICULTURE INDUSTRY**
3.2.1	Explain seasonal variations in supply and demand
3.2.2	Analyze how the principles of substitution are used in floral design
PERFORMANCE STANDARD 3.3 :	**EXPLORE THE RETAIL FLORIST INDUSTRY**
3.3.1	Compare and contrast the different types of floral shops
3.3.2	Diagram the different areas within a floral shop
3.3.3	Compare the duties of the types of floral shop employees
3.3.4	Design a floral shop using given criteria
3.3.5	Produce a product display
PERFORMANCE STANDARD 3.4 :	**CALCULATE PROFIT**
3.4.1	List overhead costs that affect the retail price
3.4.2	Explain the components of a price
3.4.3	Describe profit as a percentage of the price
3.4.4	Calculate the wholesale cost of an arrangement
3.4.5	Calculate retail markup
3.4.6	Create a wholesale order for an event
3.4.7	Create a retail invoice including sales tax
3.4.8	Analyze the potential profit of a product in order to make business management decisions

CONTENT STANDARD 4.0 : UNDERSTAND FLORAL DESIGN TOOLS AND SUPPLIES	
PERFORMANCE STANDARD 4.1 : RECOGNIZE THE PURPOSE OF FLORAL DESIGN TOOLS AND SUPPLIES	
4.1.1	Identify the tools and supplies used in industry and describe their use
4.1.2	Properly prepare floral foam for a specified use
4.1.3	Properly prepare containers for a specified use
PERFORMANCE STANDARD 4.2 : DEMONSTRATE WIRE AND TAPING TECHNIQUES	
4.2.1	Identify and demonstrate industry standard wiring techniques
4.2.2	Demonstrate industry standard stem taping techniques
4.2.3	Demonstrate industry standard container taping techniques
PERFORMANCE STANDARD 4.3 : DEMONSTRATE THE USE OF RIBBON IN DESIGN	
4.3.1	Differentiate the types of ribbon by use
4.3.2	Demonstrate the proper use of ribbon in a bud vase
4.3.3	Demonstrate the proper use of ribbon in a corsage

CONTENT STANDARD 5.0 : PLANT IDENTIFICATION	
PERFORMANCE STANDARD 5.1 : IDENTIFY FLOWER AND FOLIAGE FORMS	
5.1.1	Diagram the anatomy of a flower and review the functions
5.1.2	Compare inflorescence types
5.1.3	Categorize common flowers and foliage into filler, form, mass, or line materials
PERFORMANCE STANDARD 5.2 : IDENTIFY COMMON PLANT MATERIALS USED IN FLORAL DESIGN	
5.2.1	Identify common cut flowers used in floral design
5.2.2	Identify common foliage used in floral design
5.2.3	Identify common live plants used in floral design
5.2.4	Categorize common plant materials by seasonal availability

CONTENT STANDARD 6.0 : DESCRIBE PROPER TECHNIQUES/PROCEDURES IN CUT FLOWER PROCESSING AND STORAGE	
PERFORMANCE STANDARD 6.1 : CORRECTLY PREPARE CUT FLOWERS RECEIVED DRY	
6.1.1	List the functions of commercial floral preservatives
6.1.2	Correctly condition cut flowers and foliage according to floral species
6.1.3	Categorize the care of cut flowers and foliage by optimum temperature requirements
6.1.4	Identify causes of deterioration and death of cut flowers
PERFORMANCE STANDARD 6.2 : UNDERSTAND THE "CHAIN OF LIFE" IN THE FLORAL INDUSTRY	
6.2.1	Trace the "Chain of Life" from grower to consumer
6.2.2	Identify the procedures each link must follow to complete the "Chain of Life"
6.2.3	Prepare floral arrangement care cards for consumers

CONTENT STANDARD 7.0 : DEMONSTRATE AN UNDERSTANDING OF THE PRINCIPLES AND ELEMENTS OF FLORAL DESIGN	
PERFORMANCE STANDARD 7.1 : EXPLORE THE PRINCIPLES AND ELEMENTS OF FLORAL DESIGN	
7.1.1	Analyze the principles of floral design
7.1.2	Examine the concept of proportion and scale
7.1.3	Explain how the concept of balance is applied to floral design
7.1.4	Describe how rhythm is applied to floral work
7.1.5	Explain how the principles of dominance and focal point are used in floral design
7.1.6	Explain how space and depth enhance floral design
PERFORMANCE STANDARD 7.2 : CREATE EXAMPLES THAT FOLLOW PRINCIPLES OF FLORAL DESIGN	
7.2.1	Design corsages and boutonnieres
7.2.2	Design bud vase arrangements
7.2.3	Design centerpieces
7.2.4	Create bows and/or accessories appropriate for the design
7.2.5	Create an additional design such as holiday, wedding, sympathy, or everlasting designs

CONTENT STANDARD 8.0 : DEMONSTRATE APPROPRIATE MARKETING AND SALES STRATEGIES IN THE FLORICULTURE INDUSTRY	
PERFORMANCE STANDARD 8.1 : EXPLAIN THE BASICS OF DISPLAYS	
8.1.1	Create a display of floriculture materials for sale
8.1.2	Recognize ways of maintaining and increasing the effectiveness of floriculture business displays
PERFORMANCE STANDARD 8.2 : EXPLAIN THE BASICS OF SALES	
8.2.1	Market a floral product to a target audience
8.2.2	Complete a sales ticket
8.2.3	Use proper telephone techniques
8.2.4	Properly handle a customer complaint
8.2.5	Conduct a customer consultation

CONTENT STANDARD 9.0 : EXPLORE CAREER OPPORTUNITIES IN THE FLORICULTURE INDUSTRY	
PERFORMANCE STANDARD 9.1 : UNDERSTAND EMPLOYMENT FIELDS IN THE FLORICULTURE INDUSTRY	
9.1.1	List and describe the types of employment opportunities in the floriculture industry
9.1.2	Explore education and training for different floriculture careers
9.1.3	Understand the process of choosing a career path in the floriculture industry

CONTENT STANDARD 10.0 : PARTICIPATE IN LEADERSHIP TRAINING THROUGH MEMBERSHIP IN FFA	
PERFORMANCE STANDARD 10.1 : RECOGNIZE THE TRAITS OF EFFECTIVE LEADERS AND PARTICIPATE IN LEADERSHIP TRAINING THROUGH INVOLVEMENT IN FFA	
10.1.1	Expand leadership experience by serving as a chapter officer or on a committee
10.1.2	Exhibit leadership skills by demonstrating proper parliamentary procedure
10.1.3	Participate in a career skill development event at least at the local level
PERFORMANCE STANDARD 10.2 : UNDERSTAND THE IMPORTANCE OF SCHOOL AND COMMUNITY AWARENESS	
10.2.1	Participate in a school improvement or community development project

CONTENT STANDARD 11.0 : DESCRIBE THE RELATIONSHIP BETWEEN A SUPERVISED AGRICULTURAL EXPERIENCE (SAE) AND PREPARATION OF STUDENTS FOR A CAREER IN AGRICULTURE	
PERFORMANCE STANDARD 11.1 : MAINTAIN A SUPERVISED AGRICULTURAL EXPERIENCE	
11.1.1	Accurately maintain SAE record books
11.1.2	Apply for proficiency award related to SAE program area
11.1.3	Actively pursue necessary steps to receive higher degrees in FFA

CROSSWALKS AND ALIGNMENTS OF FLORICULTURE DESIGN AND MANAGEMENT STANDARDS AND THE COMMON CORE STATE STANDARDS, THE NEVADA SCIENCE STANDARDS, AND THE COMMON CAREER TECHNICAL CORE STANDARDS

CROSSWALK (ACADEMIC STANDARDS)

The crosswalk of the Floriculture Design and Management Standards shows links to the Common Core State Standards for English Language Arts and Mathematics and the Nevada Science Standards. The crosswalk identifies the performance indicators in which the learning objectives in the Floriculture Design and Management program support academic learning. The performance indicators are grouped according to their content standard and are crosswalked to the English Language Arts and Mathematics Common Core State Standards and the Nevada Science Standards.

ALIGNMENTS (MATHEMATICAL PRACTICES)

In addition to correlation with the Common Core Mathematics Content Standards, many performance indicators support the Common Core Mathematical Practices. The following table illustrates the alignment of the Floriculture Design and Management Standards Performance Indicators and the Common Core Mathematical Practices. This alignment identifies the performance indicators in which the learning objectives in the Floriculture Design and Management program support academic learning.

CROSSWALK (COMMON CAREER TECHNICAL CORE)

The crosswalk of the Floriculture Design and Management Standards shows links to the Common Career Technical Core. The crosswalk identifies the performance indicators in which the learning objectives in the Floriculture Design and Management program support the Common Career Technical Core. The Common Career Technical Core defines what students should know and be able to do after completing instruction in a program of study. The Floriculture Design and Management Standards are crosswalked to the Agriculture, Food & Natural Resources Career Cluster™ and the Plant Systems Career Pathway.

CROSSWALK OF FLORICULTURE DESIGN AND MANAGEMENT STANDARDS AND THE COMMON CORE STATE STANDARDS

CONTENT STANDARD 1.0: HISTORY OF FLORAL DESIGN

Performance Indicators	Common Core State Standards and Nevada Science Standards
1.1.2	**English Language Arts: Reading Standards for Literacy in Science and Technical Subjects** RST.11-12.2 Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms. **English Language Arts: Reading Standards for Informational Text** RI.11-12.1 Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain.
1.1.3	**English Language Arts: Writing Standards for Literacy in Science and Technical Subjects** WHST.11-12.7 Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.
1.1.4	**English Language Arts: Reading Standards for Informational Text** RI.11-12.7 Integrate and evaluate multiple sources of information presented in different media or formats (e.g., visually, quantitatively) as well as in words in order to address a question or solve a problem.
1.1.5	**English Language Arts: Writing Standards for Literacy in Science and Technical Subjects** WHST.11-12.8 Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation.

CONTENT STANDARD 2.0: EXPLORE THE USE OF COLOR IN FLORAL DESIGN

Performance Indicators	Common Core State Standards and Nevada Science Standards
2.1.6	**English Language Arts: Speaking and Listening Standards** SL.11-12.4 Present information, findings, and supporting evidence, conveying a clear and distinct perspective, such that listeners can follow the line of reasoning, alternative or opposing perspectives are addressed, and the organization, development, substance, and style are appropriate to purpose, audience, and a range of formal and informal tasks. SL.11-12.5 Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest.

CONTENT STANDARD 3.0: UNDERSTAND THE IMPORTANCE OF BUSINESS PRINCIPLES AND PRACTICES IN THE FLORICULTURE INDUSTRY

Performance Indicators	Common Core State Standards and Nevada Science Standards
3.1.2	**English Language Arts: Writing Standards for Literacy in Science and Technical Subjects** WHST.11-12.2d Use precise language, domain-specific vocabulary and techniques such as metaphor, simile, and analogy to manage the complexity of the topic; convey a knowledgeable stance in a style that responds to the discipline and context as well as to the expertise of likely readers. WHST.11-12.9 Draw evidence from informational texts to support analysis, reflection, and research.
3.2.1	**English Language Arts: Writing Standards for Literacy in Science and Technical Subjects** WHST.11-12.1a Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences the claim(s), counterclaims, reasons, and evidence.
3.2.2	**English Language Arts: Reading Standards for Literacy in Science and Technical Subjects** RST.11-12.9 Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.
3.3.1	**English Language Arts: Reading Standards for Literacy in Science and Technical Subjects** RST.11-12.2 Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms.
3.3.3	**English Language Arts: Reading Standards for Literacy in Science and Technical Subjects** RST.11-12.3 Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.
3.4.6	**English Language Arts: Language Standards** L.11-12.2b Spell correctly.
3.4.7	**English Language Arts: Language Standards** L.11-12.2b Spell correctly.
3.4.8	**English Language Arts: Reading Standards for Literacy in Science and Technical Subjects** RST.11-12.8 Evaluate the hypotheses, data, analysis, and conclusions in a science or technical text, verifying the data when possible and corroborating or challenging conclusions with other sources of information. **English Language Arts: Writing Standards for Literacy in Science and Technical Subjects** WHST.11-12.1b Develop claim(s) and counterclaims fairly and thoroughly, supplying the most relevant data and evidence for each while pointing out the strengths and limitations of both claim(s) and counterclaims in a discipline-appropriate form that anticipates the audience's knowledge level, concerns, values, and possible biases. WHST.11-12.7 Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.

CONTENT STANDARD 4.0: UNDERSTAND FLORAL DESIGN TOOLS AND SUPPLIES

Performance Indicators	Common Core State Standards and Nevada Science Standards
4.1.2	**English Language Arts: Reading Standards for Literacy in Science and Technical Subjects** RST.11-12.3 Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.
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4.3.3	**English Language Arts: Reading Standards for Literacy in Science and Technical Subjects** RST.11-12.3 Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.

CONTENT STANDARD 5.0: PLANT IDENTIFICATION

Performance Indicators	Common Core State Standards and Nevada Science Standards
5.1.2	**Science: Life Science** L.12.D.5 Students know biological evolution explains diversity of life.
5.1.3	**English Language Arts: Writing Standards for Literacy in Science and Technical Subjects** WHST.11-12.9 Draw evidence from informational texts to support analysis, reflection, and research.
5.2.4	**English Language Arts: Writing Standards for Literacy in Science and Technical Subjects** WHST.11-12.9 Draw evidence from informational texts to support analysis, reflection, and research.

CONTENT STANDARD 6.0: DESCRIBE PROPER TECHNIQUES/PROCEDURES IN CUT FLOWER PROCESSING AND STORAGE

Performance Indicators	Common Core State Standards and Nevada Science Standards
6.1.2	**English Language Arts: Reading Standards for Literacy in Science and Technical Subjects** RST.11-12.3 Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.
6.1.3	**English Language Arts: Writing Standards for Literacy in Science and Technical Subjects** WHST.11-12.9 Draw evidence from informational texts to support analysis, reflection, and research.
6.1.4	**Science: Life Science** L.12.B.3 Students know disease disrupts the equilibrium that exists in a healthy organism.
6.2.1	**English Language Arts: Reading Standards for Literacy in Science and Technical Subjects** RST.11-12.7 Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem.
6.2.3	**English Language Arts: Language Standards** L.11-12.2b Spell correctly. **English Language Arts: Writing Standards for Literacy in Science and Technical Subjects** WHST.11-12.2d Use precise language, domain-specific vocabulary and techniques such as metaphor, simile, and analogy to manage the complexity of the topic; convey a knowledgeable stance in a style that responds to the discipline and context as well as to the expertise of likely readers.

CONTENT STANDARD 7.0: DEMONSTRATE AN UNDERSTANDING OF THE PRINCIPLES AND ELEMENTS OF FLORAL DESIGN

Performance Indicators	Common Core State Standards and Nevada Science Standards
7.1.1	**English Language Arts: Reading Standards for Literacy in Science and Technical Subjects** RST.11-12.5 Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.
7.1.2	**English Language Arts: Reading Standards for Literacy in Science and Technical Subjects** RST.11-12.9 Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.
7.1.3	**English Language Arts: Writing Standards for Literacy in Science and Technical Subjects** WHST.11-12.2 Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes. WHST.11-12.2d Use precise language, domain-specific vocabulary and techniques such as metaphor, simile, and analogy to manage the complexity of the topic; convey a knowledgeable stance in a style that responds to the discipline and context as well as to the expertise of likely readers. WHST.11-12.9 Draw evidence from informational texts to support analysis, reflection, and research.
7.1.6	**English Language Arts: Writing Standards for Literacy in Science and Technical Subjects** WHST.11-12.2d Use precise language, domain-specific vocabulary and techniques such as metaphor, simile, and analogy to manage the complexity of the topic; convey a knowledgeable stance in a style that responds to the discipline and context as well as to the expertise of likely readers.

CONTENT STANDARD 8.0: DEMONSTRATE APPROPRIATE MARKET AND SALES STRATEGIES IN THE FLORICULTURE INDUSTRY

Performance Indicators	Common Core State Standards and Nevada Science Standards
8.2.2	**English Language Arts: Language Standards** L.11-12.2b Spell correctly.
8.2.3	**English Language Arts: Language Standards** L.11-12.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
8.2.4	**English Language Arts: Speaking and Listening Standards** SL.11-12.1d Respond thoughtfully to diverse perspectives; synthesize comments, claims, and evidence made on all sides of an issue; resolve contradictions when possible; and determine what additional information or research is required to deepen the investigation or complete the task. SL.11-12.3 Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric, assessing the stance, premises, links among ideas, word choice, points of emphasis, and tone used. SL.11-12.4 Present information, findings, and supporting evidence, conveying a clear and distinct perspective, such that listeners can follow the line of reasoning, alternative or opposing perspectives are addressed, and the organization, development, substance, and style are appropriate to purpose, audience, and a range of formal and informal tasks.
8.2.5	**English Language Arts: Language Standards** L.11-12.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. L.11-12.2b Spell correctly. **English Language Arts: Speaking and Listening Standards** SL.11-12.1d Respond thoughtfully to diverse perspectives; synthesize comments, claims, and evidence made on all sides of an issue; resolve contradictions when possible; and determine what additional information or research is required to deepen the investigation or complete the task. SL.11-12.4 Present information, findings, and supporting evidence, conveying a clear and distinct perspective, such that listeners can follow the line of reasoning, alternative or opposing perspectives are addressed, and the organization, development, substance, and style are appropriate to purpose, audience, and a range of formal and informal tasks.

CONTENT STANDARD 9.0: EXPLORE CAREER OPPORTUNITIES IN THE FLORICULTURE INDUSTRY

Performance Indicators	Common Core State Standards and Nevada Science Standards
9.1.1	**English Language Arts: Writing Standards for Literacy in Science and Technical Subjects** WHST.11-12.9 Draw evidence from informational texts to support analysis, reflection, and research.

CONTENT STANDARD 10.0: PARTICIPATE IN LEADERSHIP TRAINING THROUGH MEMBERSHIP IN FFA

Performance Indicators	Common Core State Standards and Nevada Science Standards
10.1.1	**English Language Arts: Speaking and Listening Standards** SL.11-12.1b Work with peers to promote civil, democratic discussions and decision-making, set clear goals and deadlines, and establish individual roles as needed.
10.1.2	**English Language Arts: Speaking and Listening Standards** SL.11-12.1b Work with peers to promote civil, democratic discussions and decision-making, set clear goals and deadlines, and establish individual roles as needed.
10.2.1	**English Language Arts: Speaking and Listening Standards** SL.11-12.1b Work with peers to promote civil, democratic discussions and decision-making, set clear goals and deadlines, and establish individual roles as needed.

CONTENT STANDARD 11.0: DESCRIBE THE RELATIONSHIP BETWEEN A SUPERVISED AGRICULTURAL EXPERIENCE (SAE) AND PREPARATION OF STUDENTS FOR A CAREER IN AGRICULTURE

Performance Indicators	Common Core State Standards and Nevada Science Standards
11.1.1	**English Language Arts: Language Standards** L.11-12.2b Spell correctly.
11.1.2	**English Language Arts: Writing Standards for Literacy in Science and Technical Subjects** WHST.11-12.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

ALIGNMENT OF FLORICULTURE DESIGN AND MANAGEMENT STANDARDS AND THE COMMON CORE MATHEMATICAL PRACTICES

Common Core Mathematical Practices	Floriculture Design and Management Performance Indicators
1. Make sense of problems and persevere in solving them.	3.4.3-3.4.8
2. Reason abstractly and quantitatively.	3.4.3, 3.4.8 8.2.2
3. Construct viable arguments and critique the reasoning of others.	3.4.2, 3.4.3
4. Model with mathematics.	3.4.4-3.4.8 8.2.2, 8.2.5
5. Use appropriate tools strategically.	
6. Attend to precision.	3.4.3-3.4.8 8.2.2, 8.2.5
7. Look for and make use of structure.	
8. Look for and express regularity in repeated reasoning.	3.4.5, 3.4.7, 3.4.8

CROSSWALKS OF FLORICULTURE DESIGN AND MANAGEMENT STANDARDS AND THE COMMON CAREER TECHNICAL CORE

Agriculture, Food & Natural Resources Career Cluster™ (AG)	Performance Indicators
1. Analyze how issues, trends, technologies and public policies impact systems in the Agriculture, Food & Natural Resources Career Cluster™.	3.1.1-3.1.3
2. Evaluate the nature and scope of the Agriculture, Food & Natural Resources Career Cluster™ and the role of agriculture, food and natural resources (AFNR) in society and the economy.	3.1.1-3.1.3, 3.2.1-3.2.2
3. Examine and summarize the importance of health, safety and environmental management systems in AFNR businesses.	6.1.1, 6.1.4, 6.2.1
4. Demonstrate stewardship of natural resources in AFNR activities.	6.2.1
5. Describe career opportunities and means to achieve those opportunities in each of the Agriculture, Food & Natural Resources Career Pathways.	9.1.1-9.1.3
6. Analyze the interaction among AFNR systems in the production, processing and management of food, fiber and fuel and the sustainable use of natural resources.	3.1.1-3.1.3; 6.2.1, 6.2.2, 11.1.1

Plant Systems Career Pathway (AG-PL)	Performance Indicators
1. Develop and implement a crop management plan for a given production goal that accounts for environmental factors.	6.2.1, 6.2.2
2. Apply the principles of classification, plant anatomy and plant physiology to plant production and management.	5.1.1-5.1.3, 5.2.1-5.2.4, 6.1.2, 6.1.4,
3. Propagate, culture and harvest plants and plant products based on current industry standards.	6.1.2, 6.1.4
4. Apply principles of design in plant systems to enhance an environment (e.g., floral, forest, landscape and farm).	2.1.1-2.1.6; 7.1.1-7.1.6,